UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

OFFICE OF ADMINISTRATIVE LAW JUDGES

Investigation of:

MV ETHAN ALLEN,

LAKE GEORGE, NEW YORK, *

OCTOBER 2, 2005 * Docket No.: DCA 06 MM 001

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Interview of: TOM VROOMAN

National Transportation Safety Board

490 L'Enfant Plaza East, S.W.

Washington, DC 20594

Monday,

October 10, 2005

The above-captioned matter convened, pursuant to notice at 8:55 a.m.

BEFORE: BRIAN CURTIS

APPEARANCES:

BRIAN CURTIS
National Transportation Safety Board

PETER GIONET
New York State Parks

RUSS LAYAL Warren County Sheriff's Office

HUGH QUIRK Shoreline Cruises

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1 PROCEEDINGS

- (8:55 a.m.)
- 3 MR. CURTIS: Good morning. I'm Brian Curtis of the
- 4 NTSB. It's October 10th at 8:55, and we're interviewing
- 5 Mr. Tom Vrooman this morning, who is a mechanic with Shoreline
- 6 Cruises. Tom, we're just here for the NTSB to do a safety
- 7 investigation regarding the capsizing of the Ethan Allen on the
- 8 2nd of October, and I think you may have some information that
- 9 may be beneficial to us, the engineering group, in our
- 10 investigation. If you want to take a break, let me and we'll
- 11 just pause it. And first we'll go around the room and identify
- 12 ourselves. I'm Brian Curtis, NTSB.
- MR. VROOMAN: Tom Vrooman, mechanic for Shoreline.
- 14 MR. QUIRK: Hugh Quirk, Shoreline Cruises.
- 15 MR. GIONET: Peter Gionet, New York State Parks.
- MR. LAYAL: Russ Layal (ph.), Warren County Sheriff's
- 17 Office.
- 18 INTERVIEW OF TOM VROOMAN
- 19 BY MR. CURTIS:
- 20 O. Okay, Tom. First off -- it's Brian Curtis -- back --
- 21 your history, how long you've worked with the company, your
- 22 background (indiscernible) and what you do on your job.
- 23 A. (indiscernible) only about five months. I have been
- 24 involved with the marine industry for about 10 years. I just
- 25 came up from Cape Canaveral, Florida. I worked down there in a

- 1 marina. I have a license, a Cummins mechanic, doing new
- 2 installs.
- 3 Q. And your title -- you're a mechanic?
- 4 A. Yes.
- 5 Q. A little bit about your training with Cummins, if you
- 6 could?
- 7 A. I went to school in Tampa for -- there's three
- 8 different sessions, about a week apiece. I'm certified in
- 9 computer diagnostics, new installs -- new installs for Cummins
- 10 Marine for the Sea Ray. I've been around boats for almost all
- 11 my life, engines pretty much all my life.
- 12 Q. And in this job, did you go out on the boats, did you
- 13 ride them?
- 14 A. The only ones I really went out on were the Ski
- 15 Nautiques, which are the ones that pull the parachutes. They
- 16 were mainly the ones I did the mechanics on, upkeep, oil
- 17 changes, or something. If there's a problem, I'd go and
- 18 diagnosis it and fix it.
- 19 Q. So you didn't go and act as a crew member on the
- 20 Ethan Allen?
- 21 A. No, I did not.
- Q. If I could just quickly get your age, too, as well.
- 23 A. Thirty-three.
- Q. Okay. Let's start off the Cummins, the reliability,
- 25 the background of Cummins. Any problems with it in your time

- 1 here?
- 2 A. No. The only thing I remember about that certain
- 3 vessel was, they had an issue with a water pump and said that
- 4 they need a new -- it was a Colorado water pump. It's for the
- 5 impeller. It drives the water through system and cools it, and
- 6 they went out and purchased a new one.
- 7 Q. It has a White (ph.) exhaust on that vessel?
- 8 A. Yes.
- 9 Q. If you could explain a little bit of the inlet and
- 10 the path of the water and how it ties in.
- 11 A. Okay. What happens is, the raw water pump, it takes
- 12 the sea water -- the water, raw water out of the lake, pushes
- 13 it through the engine, it goes through the risers, exhaust
- 14 manifold, and that blows the water out through the exhaust out
- 15 the back, from the pressure from the exhaust. The combustion
- 16 coming out forces it out the back.
- 17 Q. So that just mixes it in with the exhaust pressure?
- 18 A. Yes.
- 19 Q. Any problems with those White exhaust systems,
- 20 inherently --
- 21 A. No.
- 22 Q. -- from your background?
- 23 A. Sometimes you get cracks in them, but nothing major.
- 24 I've never really had any problem with them. The flappers burn
- 25 out sometimes.

- 1 Q. The flapper, that's --
- 2 A. That's inside the exhaust. It's a safety feature.
- 3 It stops the water from coming back in, into the risers. And
- 4 what that will do is fill the cylinders with water and it'll
- 5 hydro-lock it. But I've never run into that, where a hydro-
- 6 lock from the flap, but they do burn out.
- 7 Q. I see where the raw water mix in the exhaust system
- 8 pitting at that elbow there.
- 9 A. Um-hum.
- 10 Q. Is that --
- 11 A. That's a common -- I mean, these parts get old.
- 12 Q. Did you know that one had holes in it?
- 13 A. No, I've never even been down to see the engine in
- 14 it.
- 15 Q. In the Ethan Allen?
- 16 A. In the Ethan Allen. I've never been in the engine
- 17 compartment of the Ethan Allen.
- 18 Q. Oh, you never worked on the Ethan Allen?
- 19 A. No.
- 20 Q. All right. As a mechanic, are you familiar with --
- 21 what we're interested in is the bulkhead between the engine
- 22 room and the forward compartment.
- 23 A. Um-hum.
- Q. Do you know if they're totally independent or they're
- 25 common with some type of access between the two, a hole?

- 1 A. There should -- excuse me. There should be a hole.
- 2 The ones that I've dealt with, as far as down in Florida,
- 3 there's always a hole to let the water run from the front to
- 4 the back.
- 5 Q. Are you familiar with this vessel?
- A. No, I'm not.
- 7 Q. Okay.
- 8 A. These vessels, the three vessels similar to that,
- 9 I've been on the Algonquin and that was just to adjust the
- 10 throttle cable, because the new install, they put throttle
- 11 stops on it so you can run the engine.
- 12 Q. Had the captains expressed any problems or concerns
- 13 with the Ethan Allen to you --
- 14 A. No.
- 15 Q. -- that they needed fixed?
- 16 A. No.
- 17 Q. And are you familiar with the pumping bilges on the
- 18 Ethan Allen? Were you involved in that?
- 19 A. I never pumped the bilge on any of these boats except
- 20 for the Ski Nautiques.
- Q. Would that be your responsibility if there was water
- 22 in the bilge on these?
- 23 A. They have workers there in the morning that go around
- 24 and check for water in the bilges. I believe Rick and Jay do
- 25 that. I'm usually over at the Shoreline Boat Sales working on

- 1 the Ski Nautiques. Then, if there's a major problem or
- 2 something, they call me up and I come over.
- 3 Q. Do you work -- typically work on the dock where the
- 4 boats go out of?
- 5 A. No, I'm usually never over on the waterfront.
- 6 Q. So are you familiar with the daily checklist they
- 7 would go over, if they had one?
- 8 A. Not really. I know that they do check water in the
- 9 mornings.
- 10 Q. Would you be around the boats to -- in regards to how
- 11 many people they take and how frequently they're loaded to
- 12 capacity?
- 13 A. No.
- 14 Q. Are you familiar with the bricks up forward and the
- 15 placement of those?
- 16 A. I've never seen any. I said my main thing was the
- 17 Ski Nautiques, and I'm usually over at the boat sales.
- 18 Q. The engine -- the Cummins is several years old in the
- 19 Ethan Allen. Had you discussed that with anybody else at the
- 20 company, why they replaced, or do you know the details of that?
- 21 A. No, sir.
- 22 Q. Any comments from the operators or captains about
- 23 handling characteristics, is one of those vessels better than
- 24 the others in regards to (indiscernible)?
- 25 A. The only captain I've ever spoken to is the one on

- 1 the Algonquin and that was after I adjusted the throttle cable.
- 2 We took it out for a sea trial and he said it was much better.
- 3 Q. Any knowledge of -- if they get heavy rains, that the
- 4 flooding was getting in the bilges?
- 5 A. I haven't heard of anything. I'm sure that there was
- 6 some. Water seems to find its way anywhere it wants.
- 7 Q. And what type of -- the type of fuel that they use,
- 8 just diesel?
- 9 A. Diesel.
- 10 Q. No problems with filters or anything on the fuel
- 11 lines on the Cummins that you had problems with?
- 12 A. The fuel filters, the fuel/water separators, they
- 13 have Racors. These boats don't have Racors on them, I don't
- 14 believe, as far as the glass jar ones. But usually it's, you
- 15 know, just a maintenance thing. You change it every so often.
- 16 MR. CURTIS: That's all I have. I'll pass it on to
- 17 Hugh.
- 18 MR. QUIRK: I have no questions.
- 19 BY MR. GIONET:
- 20 O. Peter Gionet, New York State Parks. Tom, we've been
- 21 told that, earlier this year, a water pump went on that
- 22 Cummins. When a water pump goes, what does that mean?
- 23 A. There's an impeller inside. It's like a rubber
- 24 neoprene impeller. And what that does, it creates a suction
- 25 and it pulls the water from the lake --

- 1 Q. Um-hum.
- 2 A. -- and then the other end of it forces it through the
- 3 engine to its cooling process. If I'm correct, the water pump
- 4 that they came to me with, there was -- part of it had broke
- 5 and I advised that they get a new water pump for it and --
- 6 Q. Okay.
- 7 A. -- they did.
- 8 Q. Can you just briefly describe what part broke? Was
- 9 it, you know, part of an outlet?
- 10 A. No, I believe it was one of the --
- 11 Q. A piece of the housing?
- 12 A. -- a piece of the housing where you bolt it on. I
- 13 believe that's what it was.
- O. Okay. Now, is the impeller, are you able to take it
- 15 out and replace those impellers, or do you have to replace the
- 16 whole pump?
- 17 A. No, you can just replace the impellers.
- 18 Q. Okay.
- 19 A. But if I remember correctly, the water pump, it
- 20 wasn't -- the outside of it, something was broke on it.
- 21 Q. Okay.
- 22 A. And it wasn't -- I mean, it would've worked, but --
- Q. Okay. Now, if they did not replace that, what
- 24 problem can that cause?
- 25 A. The housing could've cracked more than it already was

- 1 because of the stress of it, and it could've leaked out of the
- 2 housing, water could've leaked out of the housing and filled
- 3 the bilge.
- 4 Q. Okay. If went unnoticed for a long time, does that
- 5 have -- will that do anything to the diesel or can the diesel
- 6 just --
- 7 A. It'll overheat it.
- 8 Q. It will overheat it.
- 9 A. If it doesn't have the proper amount of water going
- 10 through it, it'll overheat it.
- 11 Q. Okay.
- 12 A. And it'll crack stuff and --
- Q. Generally, how does a captain know that his diesel's
- 14 overheating?
- 15 A. A gauge, you'll have a gauge on your instrument
- 16 panel --
- 17 Q. Okay.
- 18 A. -- and that will have a temperature gauge on there.
- 19 Q. Okay. Now, approximately, if this water pump did
- 20 fail, would it have it be a hose to break to overheat the
- 21 engine, or if the impeller jammed up?
- 22 A. There's two different scenarios. You could heat up
- 23 an impeller. If sand got up in there, it'll chew the impeller
- 24 up and that won't force water through the engine --
- 25 Q. Okay.

- 1 A. -- or such it up. If the housing cracked, the same
- 2 thing. You won't have adequate water pressure to push it
- 3 through the engine --
- 4 Q. Okay.
- 5 A. -- and that'll overheat it. A hose breaking --
- 6 Q. Okay.
- 7 A. -- you'll definitely notice it on the gauge.
- 8 MR. GIONET: Okay, I think that's it.
- 9 BY MR. CURTIS:
- 10 Q. Brian Curtis again. The power for these batteries
- 11 for the engines --
- 12 A. Um-hum.
- Q. -- they had two how many volt?
- 14 A. Two 12-volts.
- 15 Q. Is that a 12-volt system or a 24-volt system?
- 16 A. I believe it's a 12-volt system. I think they had
- 17 them parallel.
- 18 Q. Okay. Say there was a problem -- it's a tough
- 19 question -- on the engine. Say a captain had a problem with
- 20 some relatively -- it overheated. How would that be conveyed
- 21 to you? Would he go to the owner first or would he come to you
- 22 first?
- 23 A. Usually the owner comes to me, either Matt or Jim, if
- 24 there's a problem. I'm not sure of the chain of command with
- 25 them --

- 1 Q. Okay.
- 2 A. -- over there at the waterfront. But usually when
- 3 there's a problem they call me over at the boat sales place and
- 4 I come over and look at it.
- 5 Q. Now, say, if you had to replace parts, how's the
- 6 purchasing done? Is that done by somebody else or would you go
- 7 and get the part?
- 8 A. If it's locally available, yeah, I would run down to
- 9 the marine place down the road and grab it, or I can order it
- 10 through West Marine. I haven't ordered anything. Well,
- 11 usually everything I need is right down there. I believe, with
- 12 a Cummins pump, when the replaced the water pump, they got it
- 13 right from Cummins.
- 14 Q. Is there -- where is the nearest Cummins dealer?
- 15 A. I believe it's in Albany. I'm not sure, though. But
- 16 I know that they do have a Cummins, but I don't think it's a
- 17 marine, a marine Cummins, I think it's for trucks and stuff
- 18 like that, but they can get parts.
- 19 Q. Do you know the model and the series of this Cummins?
- 20 A. I think it's a B-6, a B Series Number 6, I believe.
- 21 Q. You can get the nameplate (indiscernible)?
- 22 A. Yeah.
- 23 Q. Okay.
- 24 A. Or it's the BMC series (indiscernible) that's B
- 25 series.

- 1 Q. So you haven't been there during the off-season when
- 2 they do the winterization?
- 3 A. No, I have not.
- 4 Q. Have they told you what you'll be doing? Will you do
- 5 hose replacements or just checks or what?
- 6 A. Checks to make sure if anything's not right before it
- 7 gets put out and you winterize anything. You know, if you look
- 8 through it and if it's not correct, fix it.
- 9 MR. CURTIS: Anybody have any more questions? No?
- 10 It's 9:10, and thanks a lot, Tom, for coming in, and this
- 11 concludes the interview. Thanks a lot.
- MR. VROOMAN: You're welcome.
- 13 (Whereupon, at 9:10 a.m., the interview in the above-
- 14 entitled matter was concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: Investigation of MV Ethan Allen

Lake George, New York

October 2, 2005

Interview of Tom Vrooman

DOCKET NUMBER: DCA 06 MM 001

PLACE: Washington, D.C.

DATE: October 10, 2005

was held according to the record, and that this is the original, complete, true and accurate transcript which has been compared to the recording accomplished at the hearing.

David Martini Transcriber